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LOGINID:ssspta1619lxw

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

| | | | |
|------|----|--------|---|
| NEWS | 1 | | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS | 2 | | "Ask CAS" for self-help around the clock |
| NEWS | 3 | Jun 03 | New e-mail delivery for search results now available |
| NEWS | 4 | Aug 08 | PHARMAMarketLetter(PHARMAML) - new on STN |
| NEWS | 5 | Aug 19 | Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN |
| NEWS | 6 | Aug 26 | Sequence searching in REGISTRY enhanced |
| NEWS | 7 | Sep 03 | JAPIO has been reloaded and enhanced |
| NEWS | 8 | Sep 16 | Experimental properties added to the REGISTRY file |
| NEWS | 9 | Sep 16 | CA Section Thesaurus available in CAPLUS and CA |
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| NEWS | 16 | Dec 17 | PCTFULL now covers WP/PCT Applications from 1978 to date |
| NEWS | 17 | Dec 17 | TOXCENTER enhanced with additional content |
| NEWS | 18 | Dec 17 | Adis Clinical Trials Insight now available on STN |
| NEWS | 19 | Jan 29 | Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC |
| NEWS | 20 | Feb 13 | CANCERLIT is no longer being updated |
| NEWS | 21 | Feb 24 | METADEx enhancements |
| NEWS | 22 | Feb 24 | PCTGEN now available on STN |
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| NEWS | 41 | May 19 | RAPRA enhanced with new search field, simultaneous left and |

right truncation

NEWS 42 Jun 06 Simultaneous left and right truncation added to CBNB

NEWS 43 Jun 06 PASCAL enhanced with additional data

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS INTER General Internet Information

NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:09:12 ON 16 JUN 2003

=> fil reg

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 08:09:20 ON 16 JUN 2003

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 JUN 2003 HIGHEST RN 530739-23-2

DICTIONARY FILE UPDATES: 13 JUN 2003 HIGHEST RN 530739-23-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNnote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e c16eo6/cn

| | | |
|----|-------|-----------------|
| E1 | 1 | C16B/CN |
| E2 | 1 | C16EO4/CN |
| E3 | 1 --> | C16EO6/CN |
| E4 | 1 | C16H33-Q3CNQ/CN |
| E5 | 1 | C16K/CN |

E6 1 C16N11/CN
 E7 1 C16N12/CN
 E8 1 C16N13/CN
 E9 1 C16N14/CN
 E10 1 C16N15/CN
 E11 1 C16N8/CN
 E12 1 C16ORF3 LARGE PROTEIN (HUMAN GENE C16ORF3 REDUCED)/CN

=> s e3

L1 1 C16EO6/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
 RN 5168-91-2 REGISTRY
 CN 3,6,9,12,15,18-Hexaoxatetratriacontan-1-ol (6CI, 7CI, 8CI, 9CI) (CA
 INDEX

NAME)

OTHER NAMES:

CN C16EO6

CN Ethanol,

2-[2-[2-[2-[2-(hexadecyloxy)ethoxy]ethoxy]ethoxy]ethoxy]ethoxy
]-

CN Hexa(oxyethylene) monohexadecyl ether

CN Hexaethylene glycol hexadecyl ether

CN Hexaethylene glycol mono n-hexadecyl ether

CN Hexaethylene glycol monocetyl ether

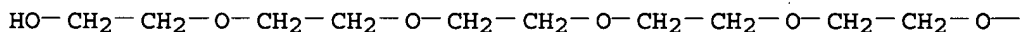
CN Hexaethylene glycol monohexadecyl ether

FS 3D CONCORD

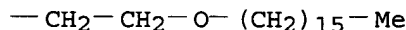
MF C28 H58 O7

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM,
 DETHERM*, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

99 REFERENCES IN FILE CA (1957 TO DATE)

99 REFERENCES IN FILE CAPLUS (1957 TO DATE)

6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

6.30

6.51

STN INTERNATIONAL LOGOFF AT 08:09:45 ON 16 JUN 2003

Welcome to STN International! Enter x:x

LOGINID:sssptal619lxw

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

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MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

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research. Use for software development or design or implementation
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:12:49 ON 16 JUN 2003

=> fil reg

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|---------------------|------------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 08:12:57 ON 16 JUN 2003

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STRUCTURE FILE UPDATES: 13 JUN 2003 HIGHEST RN 530739-23-2

DICTIONARY FILE UPDATES: 13 JUN 2003 HIGHEST RN 530739-23-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

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PROPERTIES for more information. See STNnote 27, Searching Properties
in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s c16eo6/cn

L1 1 C16EO6/CN

=> fil caplus uspatfull biosis embase medline

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|---------------------|------------------|
|----------------------|---------------------|------------------|

FULL ESTIMATED COST

4.62

4.83

FILE 'CAPLUS' ENTERED AT 08:13:20 ON 16 JUN 2003
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FILE 'USPATFULL' ENTERED AT 08:13:20 ON 16 JUN 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 08:13:20 ON 16 JUN 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC. (R)

FILE 'EMBASE' ENTERED AT 08:13:20 ON 16 JUN 2003
COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

FILE 'MEDLINE' ENTERED AT 08:13:20 ON 16 JUN 2003

=> s l1

L2 100 L1

=> s l2(p)surfactant

L3 15 L2(P) SURFACTANT

=> dup rem.l3

PROCESSING COMPLETED FOR L3

L4 15 DUP REM L3 (0 DUPLICATES REMOVED)

=> d ibib

L4 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:170835 CAPLUS

DOCUMENT NUMBER: 134:307479

TITLE: DNA Capillary Electrophoresis in Entangled Dynamic
Polymers of Surfactant Molecules

AUTHOR(S): Wei, Wei; Yeung, Edward S.

CORPORATE SOURCE: Department of Chemistry, Ames Laboratory-USDOE Iowa
State University, Ames, IA, 50011, USA

SOURCE: Analytical Chemistry (2001), 73(8), 1776-1783

CODEN: ANCHAM; ISSN: 0003-2700

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR
THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

=> d 2-6 ibib

L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:788486 CAPLUS

DOCUMENT NUMBER: 134:106327

TITLE: Capillary rise of surfactant solutions

AUTHOR(S): Tiberg, F.; Zhmud, B.; Hallstenson, K.; von Bahr, M.

CORPORATE SOURCE: Forest Product Section, Institute for Surface
Chemistry, Stockholm, S-114 86, Swed.

SOURCE: Physical Chemistry Chemical Physics (2000), 2(22),
5189-5196

PUBLISHER: CODEN: PPCPFQ; ISSN: 1463-9076
 DOCUMENT TYPE: Royal Society of Chemistry
 LANGUAGE: Journal
 REFERENCE COUNT: English
 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR
 THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:90549 CAPLUS
 DOCUMENT NUMBER: 130:164988
 TITLE: Marker contained in carbon nano-encapsulate for
 detection of fibrin clots and for labeling
 macromolecules
 INVENTOR(S): Burch, William Martin; Browitt, Rodney James; Nair,
 Chenicheri Hariharan; Shats, Elena Alexandra
 PATENT ASSIGNEE(S): The Australian National University, Australia
 SOURCE: PCT Int. Appl., 45 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|---|-----------------|----------|
| WO 9904826 | A1 | 19990204 | WO 1997-AU467 | 19970724 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9735321 | A1 | 19990216 | AU 1997-35321 | 19970724 |
| WO 9904827 | A1 | 19990204 | WO 1998-AU582 | 19980723 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9884259 | A1 | 19990216 | AU 1998-84259 | 19980723 |
| AU 744489 | B2 | 20020228 | | |
| EP 1027080 | A1 | 20000816 | EP 1998-934690 | 19980723 |
| R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE | | | | |
| JP 2001510812 | T2 | 20010807 | JP 2000-503878 | 19980723 |
| PRIORITY APPLN. INFO.: WO 1997-AU467 A 19970724 | | | | |
| WO 1998-AU582 W 19980723 | | | | |
| REFERENCE COUNT: | 6 | THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS | | |
| RECORD. ALL CITATIONS AVAILABLE IN THE RE | | | | |
| FORMAT | | | | |

L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:605754 CAPLUS
 DOCUMENT NUMBER: 129:281407

TITLE: Flexibility of Charged and Uncharged Polymer-like Micelles
AUTHOR(S): Jerke, Goetz; Pedersen, Jan Skov; Egelhaaf, Stefan Ulrich; Schurtenberger, Peter
CORPORATE SOURCE: Institut fuer Polymere, ETH Zuerich, Zurich, CH-8092, Switz.
SOURCE: Langmuir (1998), 14(21), 6013-6024
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:357148 CAPLUS
DOCUMENT NUMBER: 129:69117
TITLE: Study of nonionic surfactant polarity by high-performance liquid chromatography
AUTHOR(S): Plaza, M.; Pons, R.
CORPORATE SOURCE: C.I.D. (C.S.I.C.), Departament Tecnologia de Tensioactius, c/Jordi Girona 18-26, Barcelona, 08034, Spain
SOURCE: Colloids and Surfaces, A: Physicochemical and Engineering Aspects (1998), 137(1-3), 287-293
CODEN: CPEAEH; ISSN: 0927-7757
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:751693 CAPLUS
DOCUMENT NUMBER: 130:115670
TITLE: Studies on UNIQUAC and SAFT equations for nonionic surfactant solutions
AUTHOR(S): Li, Xiao-Sen; Lu, Jiu-Fang; Li, Yi-Gui; Liu, Jin-Chen
CORPORATE SOURCE: Department of Chemical Engineering, Tsinghua University, Beijing, 100084, Peop. Rep. China
SOURCE: Fluid Phase Equilibria (1998), 153(2), 215-229
CODEN: FPEQDT; ISSN: 0378-3812
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

=> d 7 ibib

L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:636933 CAPLUS
DOCUMENT NUMBER: 127:323123

TITLE: Structure of Nonionic Surfactant Layers Adsorbed at the Solid/Liquid Interface on Self-Assembled Monolayers with Different Surface Functionality: A Neutron Reflection Study

AUTHOR(S): Thirtle, P. N.; Li, Z. X.; Thomas, R. K.; Rennie, A. R.; Satija, S. K.; Sung, L. P.

CORPORATE SOURCE: Physical and Theoretical Chemistry Laboratory, University of Oxford, Oxford, OX1 3QZ, UK

SOURCE: Langmuir (1997), 13(20), 5451-5458
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

=> d 8 ibib

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:80323 CAPLUS

DOCUMENT NUMBER: 128:172435

TITLE: Shear-induced structures in concentrated surfactant micellar phases

AUTHOR(S): Penfold, J.; Staples, E.; Tucker, I.; Tiddy, G. J. T.;
Lodi, A. Khan

CORPORATE SOURCE: ISIS Fac., Rutherford Appleton Lab., Oxon, UK

SOURCE: Journal of Applied Crystallography (1997), 30(5, Pt. 2), 744-749
CODEN: JACGAR; ISSN: 0021-8898

PUBLISHER: Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

=> d 8 abs kwic

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS

AB Const. and oscillatory Couette shear flow were used in combination with small-angle neutron scattering to observe the shear-induced ordering in concd. surfactant micellar phases. For the lamellar phase of hexaethylene glycol monohexadecyl ether, C16E6, two distinct lamellae orientations were identified. At low shear gradients the lamellae are ordered parallel to the flow-vorticity plane, whereas at higher shear gradients the lamellae order parallel to the flow-shear gradient plane, corresponding to a rotation through 90.degree. of the axis of orientation. At intermediate values of const. shear and for oscillatory shear, both lamellae orientations are simultaneously obsd. for the 1st time in a surfactant lamellar phase. for the lamellar phase, a dispersion of the binary surfactant mixts. of dioleil cationic and 2-Et hexaglycerol monoether surfactants, a high degree of alignment, in the direction parallel to the flow-vorticity plane, is obsd. at zero and low shear. With time, during the application of a shear gradient of 25 s⁻¹, the lamellar phase transforms to a highly ordered soln. of monodisperse multilamellar vesicles.

IT 5168-91-2, C16E6
RL: PEP (Physical, engineering or chemical process); PRP (Properties);
PROC (Process)
(shear-induced structures in concd. **surfactant** micellar
phases)

=> d 9 ibib abs kwic

L4 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:637115 CAPLUS
DOCUMENT NUMBER: 125:339812
TITLE: Adsorption of Nonionic Surfactants on Silica Sol
Particles: The Effects of Sol Type and Concentration,
Surfactant Type, Concentration, and Temperature
AUTHOR(S): Penfold, J.; Staples, E.; Tucker, I.; Cummins, P.
CORPORATE SOURCE: ISIS Facility, Rutherford Appleton Laboratory,
Chilton/ Didcot/ Oxon, UK
SOURCE: Journal of Physical Chemistry (1996), 100(46),
18133-18137
CODEN: JPCHAX; ISSN: 0022-3654
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Small angle neutron scattering was used to study the nature of the
adsorption of the alkyl polyoxyethylene ether (CnEOm) nonionic
surfactants
on Ludox silica sols. Variations in the adsorbed layer thickness and
vol.
fraction of surfactant in the adsorbed layer with sol type, concn.,
temp.,
and surfactant type are obsd. In particular, the structure of the
adsorbed layer of the C16EO6 and C16EO8 surfactants (for which the bulk
micellar phase is rodlike micelles) is similar to that found for C12EO6
and C12EO5 surfactants.
IT 3055-96-7, C12E6 3055-98-9, C12E8 5168-91-2, C16E6
5698-39-5, C16E8 7631-86-9, Silica, properties
RL: PEP (Physical, engineering or chemical process); PRP (Properties);
PROC (Process)
(SANS study of concn., **surfactant** type, and temp. effects on
nonionic **surfactant** adsorption on silica sol particles)

=> d 10-15 ibib abs kwic

L4 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:311434 CAPLUS
DOCUMENT NUMBER: 124:325896
TITLE: Normal and Reverse Vesicles with Nonionic Surfactant:
Solvent Diffusion and Permeability
AUTHOR(S): Olsson, Ulf; Nakamura, Kazuyoshi; Kunieda, Hironobu;
Strey, Reinhard
CORPORATE SOURCE: Chemical Center, Lund University, Lund, S-221 00,
Swed.
SOURCE: Langmuir (1996), 12(12), 3045-3054
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Normal and reverse vesicle systems with nonionic surfactants were
studied.

The solvent self-diffusion coeff. was measured by using the 1H-NMR Fourier transform pulsed gradient spin-echo technique. In the case of normal vesicles, the H2O solvent exchanges rapidly between the inside and outside of the vesicles on the exptl. time scale (.apprxeq. 0.1 s). Only an av. self-diffusion coeff. can be measured from which the fraction of entrapped H2O can be detd. In the reverse vesicle case, the authors observe either a fast or a slow exchange, depending on the oil nature and the bilayer compn. In particular, the authors studied a semipermeable membrane system where with mixed solvent, 1 of the 2 types of solvent mols. exchanges rapidly while the other exchanges slowly on the exptl. time scale. The lifetime of a solvent mol. inside the reverse vesicles depend on the compn. of the mixed reverse bilayers, leading to an obsd. transition from fast to slow exchange conditions when varying the bilayer compn. In the slow exchange case, the self-diffusion coeffs. of solvent mols. on the outside and inside of the vesicles (where the latter reports on the vesicle self-diffusion coeff.) are resolved in principal. From the bimodal type of decay of the spin-echo amplitude, it is also possible to det. directly the fraction of solvent mols. entrapped inside the vesicles.

IT 57-50-1D, esters with fatty acids 110-82-7, Cyclohexane, properties 124-18-5, Decane 151-21-3, SDS, properties 544-76-3, Hexadecane 1450-14-2, Hexamethyldisilane 5168-91-2, C16E6 5274-68-0, C12E4 7732-18-5, Water, properties 25168-73-4D, Sucrose monooctadecanoate, mixt. with sucrose alkanoates 26446-38-8D, Sucrose monohexadecanoate, mixt. with sucrose alkanoates 27216-47-3D, Sucrose monotetradecanoate, mixt. with sucrose alkanoates
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(Fourier transform pulsed gradient spin-echo NMR study of normal and reverse nonionic **surfactant** vesicle permeability and solvent self-diffusion)

L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:153288 CAPLUS

DOCUMENT NUMBER: 124:205629

TITLE: Physical characterization of non-ionic surfactant layers adsorbed at hydrophilic and hydrophobic solid surfaces by time-resolved ellipsometry

AUTHOR(S): Tiberg, Fredrik

CORPORATE SOURCE: Physical Chem. 1, Lund Univ., Lund, S-22100, Swed.

SOURCE: Journal of the Chemical Society, Faraday Transactions (1996), 92(4), 531-8

CODEN: JCFTEV; ISSN: 0956-5000

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Nonionic surfactant adsorption at hydrophobic and hydrophilic silica surfaces has been studied by time-resolved ellipsometry. Adsorption isotherms obtained for polyethylene glycol monoalkyl ethers (CnEm) at these surfaces are presented together with data on the adsorbed layer thickness and refractive index, giving information about the concomitant evolution of the mol. organization within the adsorbed layers. It is shown that, whereas the surfactants are adsorbed as sub-monolayers or monolayers at hydrophobic surfaces, they form surface micelles or bilayer-type aggregates at hydrophilic silica. The adsorption/desorption kinetics of the surfactants at the different surfaces have also been

investigated. A kinetic model based on the assumption of diffusive transport of surfactants through a stagnant layer, coupled with the idea of a local equil. existing between the adsorbed layer and the soln. in its immediate vicinity, is used to interpret the exptl. results. This was found to reproduce quant. the main features of the time dependence obsd. during adsorption and desorption at hydrophilic as well as hydrophobic silica.

IT 3055-95-6, Pentaethylene glycol dodecyl ether 3055-96-7, Hexaethylene glycol dodecyl ether 3055-98-9, Octaethylene glycol dodecyl ether 5157-04-0, Hexaethylene glycol tetradecyl ether 5168-91-2, Hexaethylene glycol hexadecyl ether

RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (nonionic **surfactant** layers adsorbed at hydrophilic and hydrophobic solid surfaces)

L4 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:320754 CAPLUS

DOCUMENT NUMBER: 125:42592

TITLE: The effect of shear on the adsorption of non-ionic surfactants at the liquid-solid interface

AUTHOR(S): Penfold, J.; Staples, E.; Tucker, I.; Fragnetto, G.

CORPORATE SOURCE: ISIS Facility, Rutherford Appleton Laboratory, Chilton, Didcot, Oxon, UK

SOURCE: Physica B: Condensed Matter (Amsterdam) (1996), 221(1-4), 325-330

CODEN: PHYBE3; ISSN: 0921-4526

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The structure of surfactant micellar solns. subjected to shear was studied

by neutron reflection (complemented by other scattering methods) to det. the distribution of surfactant in the vicinity of the shear cell wall. The construction of a shear cell for neutron reflectivity measurements is described, and some recent preliminary results on the effect of shear on the adsorption of nonionic surfactant (hexaethylene glycol monohexadecyl ether (C16E6)) at the planar Si/soln. interface are discussed. These results provide direct evidence of shear-induced structures in the vicinity of the cell wall. At a low surfactant concn., ordered layering of the surfactant sep'd. by solvent-rich regions, and extending into the bulk soln. is obsd., in addn. to the adsorbed layer on the solid surface. The application of Poiseuille shear flow appears to induce a more ordered and well-defined structure at the interface.

IT 5168-91-2, C16E6 7440-21-3, Silicon, properties 7631-86-9, Silica, properties

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(neutron reflection study of nonionic **surfactant** soln. interfacial structure at solid wall during shear flow)

L4 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:629886 CAPLUS

DOCUMENT NUMBER: 123:12382

TITLE: Polymer-Induced Microstructural Transitions in Surfactant Solutions

AUTHOR(S): Li, Xiangbing; Lin, Zuchen; Cai, Jim; Scriven, L. E.; Davis, H. T.

CORPORATE SOURCE: Department of Chemical Engineering and Materials
Science, University of Minnesota, Minneapolis, MN,
55455, USA

SOURCE: Journal of Physical Chemistry (1995), 99(27),
10865-78

CODEN: JPCHAX; ISSN: 0022-3654

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The interactions of nonionic polymers poly(vinyl Me ether) (PVME), poly(propylene oxide) (PPO), poly(acrylic acid) (PAA), and ionic poly(sodium 4-styrenesulfonate) (PSS) with the wormlike micelles in aq. solns. of nonionic hexaethylene glycol monohexadecyl ether (C16E6), pentaethylene glycol monododecyl ether (C12E5), and cationic surfactant cetyltrimethylammonium bromide (CTAB)/sodium salicylate (NaSal) have been investigated by cryo-transmission electron microscopy and shear rheol. All the surfactant solns. were viscous, wormlike micellar solns. in the absence of polymers. The hydrophobic nonionic PPO induced a wormlike micelle to ribbon-shaped discoid micelle transition in C16E6 soln., and there is no appreciable change in C12E5 upon the addn. of PPO and PVME. The results indicate the surfactant-polymer interaction is enhanced with an increase in surfactant alkyl chain length. Both PVME and PPO induced

a wormlike-to-spherical micelle transition in the CTAB/NaSal soln. The contrast in the transitions between the C16E6 and CTAB with PPO addn. is due to the difference in the head groups which results in a difference in where the polymer resides in the surfactant aggregates. PSS has little effect on the CiEj systems, and PAA does not destroy the wormlike micelles

of the CiEj before pptn. The effects of nonionic polymer are interpreted in terms of the theory developed by R. Nagarajan (1989).

IT 57-09-0, Cetyltrimethylammonium bromide 3055-95-6, Pentaethylene glycol monododecyl ether 5168-91-2, Hexaethylene glycol monohexadecyl ether

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(surfactant; polymer-induced microstructural transitions in solns. of)

L4 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:568095 CAPLUS

DOCUMENT NUMBER: 123:65690

TITLE: Visceral leishmaniasis in the BALB/c mouse: a comparison of the in vivo activity of five nonionic surfactant vesicle preparations of sodium stibogluconate

AUTHOR(S): Williams, D. M.; Carter, K. C.; Baillie, A. J.
CORPORATE SOURCE: Dep. Immunol. Pharm. Sci., Univ. Strathclyde, Glasgow,

G4 ONR, UK

SOURCE: Journal of Drug Targeting (1995), 3(1), 1-7

CODEN: JDTAEH; ISSN: 1061-186X

PUBLISHER: Harwood

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Five nonionic surfactants (Surfactants V-IX) were screened for their ability to produce vesicles for the delivery of sodium stibogluconate. Mean vesicle diam. and antimony content were detd. prior to in vivo assessment of antiparasitic activity in a mouse model of acute visceral leishmaniasis. V/D suspensions (i.e. stibogluconate-loaded vesicles kept

in the hydrating drug soln.) were more effective against spleen, liver and bone marrow parasites than drug-loaded vesicle suspensions that had untrapped drug removed. A Surfactant IX V/D suspension was the most active antileishmanial prepn. causing 75 \pm 10%, 99 \pm 1% and 38 \pm 8% suppression of liver, spleen and bone marrow parasite burdens resp. Contrary to previous findings, a redn. in splenic and bone marrow parasite burdens was achieved using large vesicles (mean diam. >800 nm). The significance of these results is discussed.

IT 5168-91-2, Hexaethylene glycol mono n-hexadecyl ether 5274-61-3
5274-63-5, 3,6,9,12-Tetraoxaoctacosan-1-ol 26855-43-6, Triglycerol monostearate 34424-97-0, Hexaglycerol distearate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nonionic **surfactant** vesicles for sodium stibogluconate delivery in leishmaniasis)

L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:202260 CAPLUS
DOCUMENT NUMBER: 106:202260
TITLE: Interfacial tension of oil-brine systems in the presence of surfactant and cosurfactant
AUTHOR(S): Ruckenstein, E.; Rao, I. V.
CORPORATE SOURCE: Dep. Chem. Eng., State Univ. New York, Buffalo, Amherst, NY, 14260, USA
SOURCE: Journal of Colloid and Interface Science (1987), 117(1), 104-19
CODEN: JCISA5; ISSN: 0021-9797
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The interfacial tension between bulk oil and brine phases contg. a surfactant and a cosurfactant was calcd. by using a multicomponent adsorption isotherm model that accounts for the different sizes of the solute mols. as well as for the solute-solvent and solute-solute interactions in the surface phase. The presence of appreciable amts. of electrolyte in these systems alters the equil. distribution of a solute between the 2 bulk phases because of the salting-out effect, and the calcns. also account for this effect. The interfacial tension decreases with increasing concn. for both ionic and nonionic surfactants. However, for fixed values of total concns. of surfactant, the interfacial tension is much smaller for nonionic surfactants than for ionic surfactants, since the head group is larger in the former case. At fixed values of the surfactant concn., increasing amts. of cosurfactant and salt have the effect of lowering the interfacial tension. Other important parameters studied are the chain length of oil and the relative amts. of water and oil. The calcns. for both ionic and nonionic surfactants indicate that the interfacial tension decreases as the chain length of surfactant increases, while it goes through a min. as a function of cosurfactant chain length.

IT 142-87-0, Sodium decyl sulfate 151-21-3, Sodium dodecyl sulfate, properties 1191-50-0, Sodium tetradecyl sulfate 3055-96-7, Hexaoxyethylene monododecyl ether 5157-04-0 5168-91-2
RL: PRP (Properties)
(**surfactant**, adsorption of, at oil-brine interface)

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